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Integrating LGBTQ+ health into medical education

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Abstract

Background: LGBTQ+ people experience significant barriers in accessing health care including inadequate provider knowledge and stigma in health care settings. Undergraduate medical education programs have increased efforts to integrate LGBTQ+ health topics, such as comprehensive sexual history taking and gender-affirming practices, into their curriculums to provide clinically inclusive care for LGBTQ+ patients.

Approach: A Topic Steward was appointed to oversee the integration of LGBTQ+ health topics throughout the existing undergraduate medical curriculum. The aim was to expand the LGBTQ+ health curriculum for undergraduate medical students through teaching comprehensive sexual history taking; offering specialty-specific LGBTQ+ health education through clerkships; describing the difference between sex assigned at birth, gender identity, and gender expression; describing the difference between sexual orientation and sexual behaviour; identifying health care disparities that LGBTQ+ people experience; and developing an inclusive approach to providing medical care for LGBTQ+ patients.

Evaluation: The program started in July 2017 with UCSFSOM students in their first, second, or third years (\sim 150 medical students per year) participating in the integrated curriculum that included didactic lectures, small group discussions, and LGBTQ+ clerkship opportunities. The hours of LGBTQ+ health curriculum at the UCSFSOM increased from 4.5 hours to 15–20 hours in approximately 2 years under the Topic Steward approach.

Implications: The next step is to develop standardised tools for assessing LGBTQ+ health competencies for medical students. This involves integrating more questions regarding LGBTQ+ health topics in traditional exams at UCSFSOM and developing specialty-specific assessment instruments that other medical schools could administer to test core competencies in LGBTQ+ health.

1 | BACKGROUND

Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) individuals are at increased risk for health disparities¹ and experience considerable barriers to accessing health care.² Given the diverse terminology

used to describe sexual and gender identities, this paper uses the term LGBTQ+ to refer to the sexual and gender minority population and recognises that all identities are not explicitly represented in this LGBTQ acronym. The lack of provider knowledge about LGBTQ+ health has shown to be a contributor to the barriers LGBTQ+ patients

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face in accessing health care.² Health care providers' inexperience with LGBTQ+ patients and discomfort with discussing sexual orientation, gender identity, and sexual history are also challenges to achieving best practices.³ Efforts to address implicit bias and increase knowledge in medical education regarding issues like transphobia and homophobia are necessary to improve future health care providers' ability to serve LGBTQ+ patients.⁴

Research on LGBTQ+ content in medical education has previously examined curricula, topic areas, and student competency. Prior work has shown that medical students receive an average of only 5 hours of LGBTQ+ health curricula⁵ and that attempts to integrate LGBTO+ health education may face the constraints of limited space and time allotted within existing course frameworks.⁶ According to guidelines provided by the Association of American Medical Colleges (AAMC), medical students have reported that curricula do not sufficiently address LGBTQ+ topics such as treatment options for transgender patients and social determinants of health that affect LGBTO + patients. Competency in LGBTQ+ health has also varied across institutional settings, medical schools, career stages, and geographic locations. Medical students have reported a lack of competency in various core AAMC competencies of LGBTQ+ health including comprehensive sexual history taking, asking about sexual orientation or pronouns, and gender-affirming care—health care that is affirming of one's gender identity and may encompass social, mental, and physical needs.^{7,8} Medical education programs have employed didactic lectures, ^{6,9–13} local clinic visits, ¹³ small-group discussions, ^{10,11,13} case studies, 10,11 and interactive patient panels and encounters 10-12 in an effort to provide LGBTQ+ health content. LGBTQ+ curricula topics have included social and cultural aspects, health care disparities, intersectionality, best practices for clinical interactions with LGBTQ+ patients, inclusive sexual history taking, terminology, communication strategies, implicit and explicit biases, and transgender health. 7,9-13 The success of one of these interventions was evaluated through selfreported surveys from medical students before and after being exposed to the LGBTQ+ health curricula, and most medical students indicated higher self-reported comfort with treating LGBTQ+ patients and taking comprehensive sexual histories after the educational intervention.9

To date, many approaches have focused on introducing sexual orientation and gender identity (SOGI) as important patient characteristics that may impact sexual health,⁵ but LGBTQ+ health extends to all aspects of health and well-being, not just sexual health. For the first time, UCSFSOM named faculty content experts as Topic Stewards, who were responsible for weaving in new content that did not already fit under existing departments into all levels of the curriculum using a spiralling technique. The Topic Steward for LGBTQ+ health was charged with ensuring that LGBTQ+ health topics were incorporated across the newly integrated curriculum through case examples, lectures on specific medical conditions, and treatment planning. Another charge involved the introduction of spiral learning, building upon previously taught concepts with newer, specialty-specific content to move past traditional instruction that focused solely on SOGI and

standard definitions.¹³ Spiral learning allows for higher level content that could be applied during clerkship rotations and other clinical-based areas of medical education. The purpose of this paper is to describe the approach used by the UCSFSOM Topic Steward for LGBTQ+ health so that medical schools may adopt these methods to ensure the provision of medical school content and curriculum that is inclusive of the health needs of these patients.

The Topic Steward for LGBTQ+ health was charged with ensuring that LGBTQ+ health topics were incorporated across the newly integrated curriculum.

2 | APPROACH

2.1 | Topic Steward role

In the process of continual quality improvement to the UCSFSOM curriculum, "Topic Stewards" were appointed and funded to address curriculum content for which there was not a specific home department, such as pathology or cardiology, for example. Topics included violence, high-value care, ethics, and-in this case-LGBTQ+ health. The Topic Stewards were recruited from faculty based on their experiences and expertise and received 10% non-clinical salary support paid directly to their departments by the UCSFSOM. The positions were subject to an annual renewal, which required approval by the Dean, and were evaluated based on performance and with no predetermined term limit. This program was initiated in July 2017 with approximately 450 medical students in their first, second, or third years of medical school receiving the LGBTQ+ health curriculum. The outcomes of the Topic Steward innovation were measured in terms of additional hours of LGBTQ+ health topics included in the UCSFSOM curriculum.

2.2 | Prior curriculum

Before the implementation of a Topic Steward to address gaps in LGBTQ+ health content, the UCSFSOM only allocated 4.5 hours dedicated to LGBTQ+ health topics, which was concentrated into a single half-day session delivered during the first year of medical school. This half-day curriculum consisted of a 1-hour lecture, a 90-minute small group discussion, and a 2-hour patient panel (see Table 1). The patient panel, while well-intentioned, unfortunately lacked diversity in its representation of broader LGBTQ+ identities.



TABLE 1 Prior LGBTQ+ health curriculum versus Topic Steward LGBTQ+ health curriculum

Prior LGBTQ+	
curriculum	Topic Steward LGBTQ+ curriculum
1-hour SOGI lecture	(MS1 and MS2) Health and the Individual Block: 1-hour SOGI lecture
90-minute small group discussion	(MS1 and MS2) Health and the Individual Block: 2-hour small group discussion
2-hour patient panel	(MS1 and MS2) Health and Society Block: 50-minute lecture
	(MS1 and MS2) Health and Society Block: 90-minute small group discussion
	(MS1 and MS2) 3-hour elective sexual history taking workshop
	(MS3) Core Clerkships: each clerkship has a 60-minute LGBTQ+ focused lecture

TABLE 2 Selected LGBTQ+ health topics across clerkship specialties

Clerkship	LGBTQ+ health topics covered
Anaesthesia	Anaesthesia drug interactions with medications LGBTQ+ patients may be taking, perioperative care for transgender patients
Family Medicine	Hormone therapy and inclusive primary sexual health care
Internal Medicine	Hormones and thromboembolic risk (theoretical or real)
Neurology	Strokes and hormones
OB/GYN	Transgender pregnancies
Paediatrics	Supporting queer paediatric patients, puberty blocking medication
Psychiatry	Mental health for LGBTQ+ patients
Surgery	Transgender surgery

2.3 | Topic Steward approach: First and second year medical students

The Topic Steward pivoted from the previous concentrated curriculum to a series of facilitated discussions in LGBTQ+ health topics over the course of 3 years of medical students' education. This new curriculum focused on intersectionality, so that medical students would be exposed to how multiple factors, such as a patient's race, sexuality, and gender, can impact their health outcomes and experiences in receiving medical care. In their first week at the UCSFSOM, students previously attended the "Differences Matter Orientation," which focused on issues of racial and ethnic health disparities. The Topic Steward collaborated with this initiative to incorporate the use of pronouns and normalise this gender-affirming practice among new medical students.

The Topic Steward pivoted from the previous concentrated curriculum to a series of facilitated discussions in LGBTQ+ health topics.

The Topic Steward also introduced a 60-minute lecture and 120-minute small group session covering LGBTQ+ inclusive terminology, social determinants of health related to discrimination, and

sexual health within the 4-week "Health and the Individual" block. The small group session, developed with student input, focused on case studies that demonstrated problematic approaches to LGBTQ + patient care and offered alternatives that emphasised the importance of shared-decision making. Within the 4-week "Health and Society" block, the Topic Steward implemented a 50-minute lecture and a 90-minute small-group session on LGBTQ+ inclusive sexual history taking. Afterwards, the medical students could elect to further their skills in sexual history by taking part in a 3-hour workshop led by an outside expert who specialised in LGBTQ+ sexual health. Also, in the basic science curriculum (pre-clinical years), the Topic Steward worked with lecturers to include LGBTQ+ content in existing lectures focused on cancer screenings, violence and trauma, antibiotics and outbreaks of infectious disease, addiction, pregnancies, and Pre-Exposure Prophylaxis for HIV prevention.

2.4 | Topic Steward approach: Core clinical clerkships for third-year medical students

The Topic Steward expanded clerkship opportunities so that clinical clerkship students (MS3) could continue to explore LGBTQ+ health care across various specialties such as anaesthesia, paediatrics, obstetrics and gynaecology, and neurology (see Table 2). Each specialty included a 60-minute LGBTQ+ lecture from inclusive perioperative environments for LGBTQ+ patients to puberty suppression. Prior to offering these LGBTQ+ related clerkships, the medical school curriculum had only a 1-hour SOGI lecture, a 90-minute small group discussion with outdated case studies, and a 2-hour patient panel. With the Topic Steward approach, LGBTQ+ health topics were integrated across core clerkships, providing more hours of exposure to LGBTQ+ health.



The Topic Steward expanded clerkship opportunities so that clinical clerkship students (MS3) could continue to explore LGBTQ+ health care

3 **EVALUATION**

The Topic Steward approach increased the amount of time dedicated to LGBTQ+ health topics from 4.5 hours to 15-20 hours in years 1-3 by collaborating with existing courses and clerkships. Many faculty lecturers, clerkship directors, and clinical faculty took advantage of the Topic Steward as a content expert to review material before dissemination to students. The Topic Steward's expertise on LGBTO+ health was also applied to the creation of a Diversity, Equity, and Inclusion Teaching Certificate program for the entire School of Medicine's faculty along with a multidisciplinary LGBTQ+ Health Certificate program, which was available to everyone on campus. The work of the Topic Steward also led to an understanding of curricular gaps and potential areas for continued improvement in LGBTQ+ related curricula. Lastly, the presence of an individual dedicated to this topic showed momentum towards improved health care delivery for LGBTQ+ people.

The Topic Steward approach increased the amount of time dedicated to LGBTQ+ health topics from 4.5 hours to 15-20 hours.

The work of the Topic Steward also led to an understanding of curricular gaps and potential areas for continued improvement in LGBTQ+ related curricula.

The LGBTQ+ Health Topic Steward's work was recognised by promotion to an elevated position within curriculum design and evaluation along with two other Topic Stewards. These three promoted Topic Stewards were called Topic Curators and were responsible for leveraging their knowledge to incorporate needed topics into the curriculum. Other Topic Stewards, such as those working on high-value care and violence, were also successful in implementing new curricula. Although the success of curriculum redesign is multifactorial and may hinge upon student expectations, Topic Steward dedication, or institutional support and acceptance of a topic, we believe that the introduction of Topic Stewards is a valuable way of enhancing integration of curriculum subjects, such as LGBTO+ health that do not "sit" within a specific medical discipline.

The lasting impact of these educational interventions needs to be assessed. The creation of a summative evaluation system could lead to an understanding of how much LGBTQ+ health knowledge was retained. Student success at navigating health care conversations and situations with LGBTQ+ individuals could also potentially be assessed. While many students may report an increase in selfdescribed comfort in caring for this population, this may not translate into improved care, opening the door for further educational intervention.

IMPLICATIONS

The main driver of success of the Topic Steward role was the provision of institutional support. At UCSFSOM, this institutional support was operationalised through an initial financial investment that enabled the Topic Steward to dedicate non-clinical time to curriculum development. A balance between subject matter expertise and skill in pedagogy is also needed and should be considered when selecting individuals to fulfil the role. An ideal Topic Steward candidate will understand the need to leverage the expertise of others, while using their own skills within curriculum development to help guide student learning and application of the core AAMC competencies.

An ideal Topic Steward candidate will understand the need to leverage the expertise of others, while using their own skills within curriculum development.

Lessons learned throughout this process are potentially applicable to other topics that focus on work with historically marginalised

populations. We recognise that discussing LGBTQ+ topics can be emotionally taxing for members of the LGBTQ+ at UCSFSOM. Increased awareness to the emotional load that the role can have on a minority group undertaking this work is paramount for future implementation. Also, while attention was paid to the clerkship content in MS3, we recommend including more LGBTQ+ health education during clerkships, as students gain applicable LGBTQ+ health knowledge for direct patient care during this phase of education. Lastly, although a student curriculum group was created later during this process, the inclusion of such a group from the inception of a Topic Steward program is recommended to ensure that the curriculum is well received among students and adjusted based on their feedback and needs. Students offer a unique perspective, and as consumers of the content being delivered, their formative input is of incredible value, particularly regarding issues that may arise in the everyday delivery of LGBTQ+ content.

Currently, funding for the LGBTQ+ Topic Steward program has ended and has been integrated into the role of the Mapping and Integration Committee along with other anti-oppressive work. The Mapping and Integration Committee continually assesses curriculum topics, including LGBTQ+ health, to determine where changes need to be made. This committee includes many curricular experts in addition to the three Topic Curators-funded faculty positions from the School of Medicine dedicated to continued quality improvement of all topics. Additionally, the lectures and interventions implemented by the Topic Steward continue to be delivered by faculty. The Topic Steward program was designed to be a temporary role that led to long-term integration via the Topic Curator approach. The funding for the Steward Program was always time-limited with the idea being that the Topic Stewards would complete most of the curriculum development early on, and the Topic Curators would then take over to lead the sustainable continuation of curriculum integration.

The Topic Steward program was designed to be a temporary role that led to long-term integration via the Topic Curator approach.

Limitations exist on the assessment of efficacy for the Topic Steward approach due to the lack of pre- and post-curriculum evaluations and standardised tools for assessing LGBTQ+ health competencies in medical students. Given that self-reported knowledge is not the most accurate method of assessing medical students' understanding of LGBTQ+ health topics, the Topic Steward aims to test specialty-specific educational interventions through traditional exams in the future. While UCSFSOM has rolled out a trial evaluation effort to test medical students' knowledge regarding the care of LGBTQ+

patients (e.g., the potential interactions between medications transgender patients may be taking and anaesthesia drugs), these instruments have not been developed widely for administration beyond UCSFSOM.

These findings are pertinent to medical educators who are interested in increasing the amount of exposure medical students receive to care for LGBTQ+ patients, a group who often experience health disparities.

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CONFLICT OF INTEREST

The authors have no conflict of interest to disclose.

ETHICS STATEMENT

Under local IRB guidance, this work was exempt from full ethical review.

PREVIOUS PRESENTATIONS

Role of Topic Steward was presented at the Building the Next Generation of Academic Physicians (BNGAP) LGBT Health Workforce Conference in 2019.

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